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University of Northern Iowa

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DO OFFENDERS' LIFE GOALS REFLECT LOCUS OF CONTROL AND
PERSONALITY TRAITS?

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

Luci L. Dumas
University of Northern Iowa
May 2014

ABSTRACT

According to the Good Lives Model (Ward, 2002) it is imperative that offenders in rehabilitation recognize which life goals are important to them and how they can achieve a 'good life.' Including the evaluation of life goals in treatment can be beneficial not only for the individuals being treated but for the community into which they are transitioning. Seventy-six male, residential offenders were assessed on type and perception of life goals during semi-structured interviews. They also completed a personality inventory, locus of control scale, and self-esteem scale. Hierarchical multiple regression analyses for types of goals and perception of goals were conducted to examine the hypothesized predictions. Results indicate that higher levels of openness and an internal locus of control predicted the presence of personal growth goals, and emotional stability is the strongest predictor of positive goal perception for this offender sample. Findings from this study have implications for the use of goals and the importance of emotional stability in treatment of offenders.

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This Study by: Luci L. Dumas

Entitled: Do Offenders' Life Goals Reflect Locus of Control and Personality Traits?

has been approved as meeting the thesis requirement for the

Degree of Master of Arts, Psychology

_____	_____
Date	Dr. Sundé Nesbit, Chair, Thesis Committee
_____	_____
Date	Dr. Andrew Gilpin, Thesis Committee Member
_____	_____
Date	Dr. Ronald Gorton, Thesis Committee Member
_____	_____
Date	Dr. Michael J. Licari, Dean, Graduate College

In memory of my father, who instilled in me the belief that I can do absolutely anything I
put my mind to.

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CHAPTER 1

INTRODUCTION

Theoretical Background

The culture of the United States (US) corrections systems is often criticized due to its high number of incarcerated people and long sentences. According to the 2011 Incarceration statistics from the Bureau of Justice, one in every 107 adults is incarcerated, and one in every 50 adults is on probation or parole (Glaze & Parks, 2012). With the current US population, this means that nearly 3 million individuals are incarcerated and approximately 6 million individuals are serving a supervisory sentence. A large group of Americans are incarcerated and are in need of beneficial treatment programs. The current paradigm in US offender rehabilitation is that of a risk-based system in which offenders are treated enough to eliminate the maladaptive behaviors and avoid future offenses (Maruna & LeBel, 2003). A risk-based system revolves around risk-management; keeping the community safe from the criminal. This paradigm views sanctions and control as the most efficient way to keep offenders from re-offending (Maruna & LeBel, 2003). Evidence has not supported this approach to offender rehabilitation; results from a study investigating community surveillance in nine states found that there was no decrease in criminal behavior from offenders on probation or parole. Further, more violations were detected with the higher surveillance, suggesting that recidivism was even higher under this program (Petersilia & Turner, 1993). This risk-based system appears to serve as a bare minimum approach to offender rehabilitation.

Although these individuals have broken the law and consequently have been incarcerated, it is important to remember that they still have aspirations and hopes. There are many theories as to how and why crime happens. It is possible that, by focusing on the individuals' needs, many of the reasons for their offending behavior can be resolved (Ward, 2002). There have been several examples in previous literature which support the claim that the more individuals do to fulfill their own lives the less likely they are to participate in offending behaviors. Fine and Torre (2006) reported on the benefits of college on female inmates. Not only did the incarcerated women report more positive views of themselves, but they also found that, according to the staff, college programs made the facility seem safer and more manageable. A more recent development in offender rehabilitation emerged with the use of dog training programs. In these programs, inmates who meet a set of requirements are given dogs from a shelter to train into service dogs. The dogs live in the prison with the inmates and go through rigorous training programs with their inmate trainer in order to meet the qualifications of a service dog. This program has proven to be beneficial, not only for the dog who will eventually get a forever home and the community who will benefit from the services of the dog, but also for the inmate who serves as the trainer. A study investigating the impact of dog training programs in prisons found that membership in the treatment group who were training dogs predicted significantly more improvements in behavior of the offenders than the control group (Fournier, Geller, & Fortney, 2007). This lends support to the idea that, when individuals exercise self-discipline, responsibility, and work towards a future-focused goal, there are positive impacts on their behavior. While several areas of self-

improvement have been studied in an offender population, there have not been many researchers who have investigated the role of life goals in offender rehabilitation.

The fields of forensic and clinical psychology often look at what is wrong with individuals: their failed relationships, violent behavior, or psychopathology. Focusing on these aspects of someone's life is easy to do, particularly with offenders who have a history of unhealthy behaviors. Many rehabilitation efforts for offenders focus on the safety of the community (risk-assessment) and on reducing or eliminating unhealthy behaviors. Throughout history, there have been few rehabilitation efforts that focused on the safety and health of the individual offender (needs-assessment) as opposed to the community, or on fostering healthy habits and behaviors, as opposed to just reducing negative ones.

Positive Psychology

Focusing on and studying the healthy behaviors and patterns that allow individuals to operate at their highest potential is often referred to as *positive psychology* (Myers, 2005, p. 506). The study of these positive aspects is important because we must define what is healthy in order to know what is unhealthy. In positive psychology, it is also important to identify and foster the individual's strengths. Seligman and Csikszentmihalyi (2000) said, "Treatment is not just fixing what is broken, it is nurturing what is best," (p. 7). Positive aspects of psychology and *a life worth living* (Seligman & Csikszentmihalyi, 2000) deserve to be studied more frequently.

A pioneer in the field of positive psychology, Carl Jung hailed from the psychoanalytic camp and focused a substantial amount of his writings on positive aspects

of psychology. In his book 'Modern Man in Search of a Soul' (1933/1955), Jung stated that if an individual is living a fully fulfilled life that is healthy in all aspects, there is no room for pathology. While Jung paved the way for the idea of a fulfilling life, Abraham Maslow developed a rich and extensive theory that encompassed everything from causes of pathology to a model of a fulfilled life. Maslow believed that individuals' needs are organized in a hierarchy with fundamental, survival needs being the foundation of the hierarchy; as you get higher in this hierarchy, the needs become less fundamental and more necessary for living a fulfilling and healthy life (psychologically, spiritually, etc.). Maslow argued that needs such as food and shelter were placed on the lower levels of the hierarchy, whereas needs such as self-love, individualism, and love for others were placed at higher levels (Maslow, 1970). At the highest level of the hierarchy, and what Maslow believed that all healthy individuals strive to obtain, is *self-actualization*. The idea of self-actualization was a helpful addition to the study of positive psychology because it modeled what a healthy individual may look like. There are several characteristics to consider when thinking of a self-actualized person. Self-actualized people accept reality with grace, they are spontaneous and natural in behavior, and they are more concerned with problems external to themselves that deal with the well-being of others. They tolerate and enjoy alone time and grow according to their own motivations and not those around them. People who have achieved self-actualization appreciate the simplest things in life and experience supernatural *peak experiences*. Peak experiences are metaphysical; when an individual has a peak experience, he or she describes it as feeling 'one with the universe,' feelings of belonging, experiencing non-judgmental

views on reality, and peace. Self-actualized people have a genuine need to help human beings in general; they have deeper and more profound relationships than others, and they view all humans as equal and deserving of respect. The self-actualized person has a clear understanding of right and wrong, a sense of humor of the human condition (e.g., they laugh with people not at them), they are creative and relatively uninfluenced by the culture around them (Maslow, 1970). Positive psychologists would view criminal behavior as being the product of an individual's unmet needs; therefore an individual having their needs met as well as pursuing a fulfilling life would not be expected to resort to criminal behavior. Specific theories and implementation of positive psychology approaches with offenders will be discussed in the next section.

Positive Psychology with Offenders

Addressing current offender issues using the positive psychology approach can be beneficial. There have been several rehabilitation strategies and civil programs implemented employing a positive psychology approach. In these approaches, the strengths of offenders are highlighted instead of focusing on their failures. The traditional approach of offender rehabilitation programs is *risk-based*, where society is 'tough' on offenders as they re-enter society; this approach encourages civil servants and rehabilitators to look for misbehavior in the offending individual and focus their energy on preventing that misbehavior. Maruna and LeBel (2003) introduced an alternative approach to rehabilitation. A *needs-based* approach focuses on the needs of the individual offender as opposed to the need for security of the community. As Maslow (1970) discussed in his hierarchy of needs theory, in order for humans to do well in life or reach

their full potential, all their basic needs must be met. This theory has been applied in the study of offender rehabilitation because it has become evident that many individuals remain in a life of crime and continue to reoffend because they are attempting to meet their basic needs (Maruna & LeBel, 2003). One of the most common requirements mentioned by repeat offenders on what would keep them out of institutions is basic needs like shelter (Erickson, Crow, Zurcher, & Connet, 1973). Not only does meeting the basic needs of offenders help to discourage them from future offending behaviors, but focusing on their strengths and good behaviors can also be beneficial. When rehabilitation programs focus solely on reducing maladaptive offending behaviors, they do not allow room for the positive improvement of the offender. By removing one bad behavior and not teaching any good behaviors to replace them, the offenders will find new maladaptive or 'anti-social' behaviors to engage in (Gendreau, Goggin, & Cullen, 1999). It remains very important that treatment focuses on not only reducing these maladaptive behaviors but also on teaching offenders what 'good' behaviors are expected of them. This may be accomplished by offering continued treatment programs and rewards as they transition back into society. Preliminary research has shown that implementing programs that encourage offenders to focus on achieving success as opposed to avoiding failure have reduced recidivism in a minimum-security facility (Wormith et al., 2007). Maruna and LeBel (2003) stressed the idea of rehabilitation programs assigning meaningful roles to each offender. They argued that meaningful roles lead to a meaningful life; this is important not just for the offender population, but for humans in general. As Carl Jung (1955) and Abraham Maslow (1970) had discussed decades earlier, the happiest and

healthiest individuals are those who are striving for and achieving a meaningful life. If these individuals were living life at their full potential, they would not have time or energy to give to maladaptive, criminal behavior. According to the needs-based approach, one of the goals of rehabilitation for offender populations should be to educate and encourage offenders on what a good life is and how to achieve it.

The Good Lives Model of Change

The concept of a *good life* is different for each individual. Ward (2002) states, “what constitutes a fulfilling or worthwhile life... is chosen by the individual,” not by some overarching idea of what society says it should be (p. 516). According to Ward, there are three classes of *primary goods* that are required for a healthy life: body, self, and social life. The good life that Ward refers to is constructed of these primary goods and the conditions in which they can be acquired. Like Maslow before him, Ward reflected on how important it is for individuals to have their needs met in order to thrive. Ward took a more precise view of these needs by saying that each individual has a different combination of these needs (Ward, 2002). Many treatment programs that are currently in use in correctional facilities are focused on risk management (primarily benefits for the community) instead of achieving a good life (primarily benefits for the individual). Focusing on the individual’s treatment as opposed to risk management may be more beneficial.

Ward (2002) recommended that the good lives model should be taken into consideration anytime a therapist is treating an offender. However, it is important to note that the treatment plan using Ward’s model would differ for each individual, because one

person's *good life* is not the same as the next person's. In the theory of criminogenic needs, Ward and Stewart (2003) also highlighted the importance of individualized concepts of a good life and underscored the importance of each individual's unique set of circumstances and personal attributes. Ward (2002) argued that therapists should avoid administering a general treatment plan that assumes a standard 'cookie-cutter' model of a good life for all individuals. Rather, tailoring the treatment plans to each individual's concept of their unique good life will be more rewarding and successful.

While focusing on meeting individuals' needs is a staple of a needs-based approach to offender rehabilitation, decreasing crime is also a very important piece of the puzzle. Criminal acts themselves do not define an individual as a criminal for the rest of their lives. Some individuals continue to offend their whole lives; however, most offenders show reductions or more sporadic patterns of criminality as they age (Glaser, 1964; Sampson & Laub, 2003). Many researchers have attempted to pinpoint the factors associated with initiation, continuation, and termination of illegal behavior. Maruna (2001) described desistance as a "long-term abstinence from crime" for those who have offended on a normal basis in the past (p. 24). He viewed it as a "maintenance process," the idea that desistance is a process is felt throughout the criminal community with the use of terms like "going straight" or "going legit" (Maruna, 2001, p. 24). Labeling this change as a process, rather than an isolated event, shows that the individual recognizes the work that must be done to achieve or maintain desistance.

The process of desisting or persisting for offenders could be due to more than just environmental influences; it also could be heavily impacted by intrapersonal and

interpersonal factors. Maruna (2001) conducted the Liverpool Desistance Study, a qualitative study evaluating different individual factors that influenced desistance. Participants were interviewed at varying time points and asked their opinions regarding complex topics such as rehabilitation and offending behaviors. He compared the responses of offenders who continued to offend to those from offenders who abstained from offending. A difference he found between the two groups was that the offenders who abstained had developed new identities for themselves and what they wanted for their lives. They also tended to view their lives as a 'redemption script', where they acknowledge their past shortfalls but experienced a 'rebirth' and now strive to create a new life for themselves. Those offenders who continued to offend saw themselves as victims whose fate was already determined. Because of the longitudinal and personal characteristics of data collection for this particular study, Maruna described that the interviews with this offender sample shaped his perspectives on the offender population generally. Not only did he notice a relationship between an offender's perceived control and desistance, but he also found that if the individual had a plan of action for their future goals they felt surer that they would achieve them.

CHAPTER 2

LITERATURE REVIEW

Life Goals

Every human has some sort of aspiration; working towards and achieving these aspirations is what constitutes a meaningful life. Karoly (1993) introduced a *goals systems* approach to assessment and treatment; he stated that every individual has certain goals in which they strive for, specific strengths, and environmental factors which can influence many different outcomes. He listed three components of goal systems: “personal goals,” “instrumental skills,” and “facilitative and impedimentary environmental conditions” (Karoly, 1993; p. 274). While skills and conditions are an important part of goal achievement, the individual’s personal or life goals are what inspire them or start them on their journey. All humans aspire to some goals throughout their lives. There is a wide range of goals that individuals can aspire to, ranging from career goals to family goals to goals of self-improvement. The life goals of people become very important in that they dictate their decisions.

According to Deci and Ryan’s (1985) Self-Determination Theory, motivation can take two forms: *intrinsic motivation* and *extrinsic motivation*. Intrinsic motivation refers to the motivation to do things for enjoyment or personal non-material gains, whereas extrinsic motivation refers to the motivation to do things for external gains and/or material rewards. Individuals’ aspirations can be looked at in a similar vein: extrinsic aspirations refer to material wealth, fame, or a positive public image; whereas intrinsic aspirations refer to personal growth, healthy relationships, or physical/emotional health

(Kasser & Ryan, 1996). Aspirations can also be referred to as life goals (Deci & Ryan, 2012). Research has shown that the existence of these life goals are very valuable and the lack of these goals can be detrimental; when individuals focus more on extrinsic aspirations they engage in more risky behavior (Williams, Cox, Hedberg, & Deci, 2000). It is possible that, since many offenders engage in behaviors that are more risky than the norm, they may be focusing more on these extrinsic aspirations instead of life goals. Niemiec, Ryan, and Deci (2009) found that when people labeled certain goals as highly important to them it strongly predicted attainment of those goals a year later. It was also discovered in the same study that attainment of intrinsic goals increased people's well-being and decreased their ill-being while the exact opposite was found for attainment of extrinsic goals. Reported extrinsic goals were found to have no relationship with well-being but had a positive relationship with ill-being, suggesting that individuals with extrinsic goals were more unhappy than those with intrinsic goals. These findings provide another reason why assessing life goals in offenders can be beneficial, not only for the offender themselves, but for the community as well. Encouraging and fostering intrinsic life goals and their importance can be advantageous for rehabilitation programs.

The research on life goals in offenders is scant. Life goals for adolescent offenders have been investigated in several studies (Laben, Dodd, & Sneed, 1991; Shears, 2004; Williams et al., 2000). A negative view of one's future combined with boredom was found to be strongly related to a higher rate of offending behaviors among high school age adolescents (Newberry & Duncan, 2001). Adolescents who had a more salient idea of their life goals and how to achieve them were more likely to lead successful

healthy lives as adults and less likely to commit crime in the future (Paternoster, Pogarsky, & Zimmerman, 2011). The use of life goals in the treatment of sexual offenders was shown to strengthen their engagement in treatment (Mann, Webster, Schofield, & Marshall, 2004). There has not been any research looking into the details of life goals for non-sexual adult offenders until the development and implementation of the Personal Concerns Inventory- Offender Adaptation. In research using the Personal Concerns Inventory-Offender Adaptation, it was found that the most frequently reported content area for which offenders shared their goals and aspirations was *self-change*. Goals included under self-change are self-control goals of reducing substance use, stopping offending behaviors, and temper control. Self-improvement goals of having a more positive outlook, being healthier, and increasing confidence were also included in the self-change category (McMurran, Theodosi, Sweeney, & Sellen, 2008).

Personality Traits

Life goals are an important part of an individual's life and differ from person to person. Due to this variability between persons, it seems feasible that some intrapersonal variables could affect the aspects of these goals. Costa and McCrae (1994) believe that individual's goals are products of their personalities because personality is a rather static set of constructs.

The five factor model of personality is comprised of personality traits that are present in different variations within all individuals. Extraversion is the most robust factor in the model; this factor measures sociability, assertiveness and stimulation threshold, among other things. The factor called Agreeableness measures how friendly or

agreeable an individual is (Digman, 1990). Conscientiousness has also been referred to as “will to achieve” (Digman & Takemoto-Chock, 1981; p. 155), and measures things such as self-control and dependability. Neuroticism, or emotional instability, is the fourth factor which refers to one’s emotionality. Openness, the fifth factor, refers to openness to experience, intellect, and culture (Digman, 1990).

Past research utilizing non-offender samples has shown several different relationships between isolated personality traits and life goals. Persons high in Openness were more likely to have goals related to personal growth (Ludtke, Trautwein, & Husemann, 2009) and goals related to creative achievement (Helson, Roberts, & Agronick, 1995; McCrae & Costa, 1997). Goals relating to achievement in general were correlated with Conscientiousness levels (Kaiser & Ozer, 1994). Those reporting lower levels of Emotional Stability tended to have more extrinsic and materialistic goals (Romero, Gomez-Fraguela, & Villar, 2012). Individuals reporting higher levels of Agreeableness often had goals related to affiliation (Kaiser & Ozer, 1994). Those who were considered Extroverts were more likely than introverts to believe that they would achieve their goals (Romero et al., 2012). Several studies also found that different combinations of the Big Five traits were related with specific goals. Combinations of higher levels of Openness, Extraversion, and Agreeableness predicted the desire for social goals like helping others and harmonious relationships, Higher Extraversion and Conscientiousness levels were related to the desire for a successful career; Higher Extraversion combined with lower Agreeableness were related to political goals (Bleidorn et al., 2010; Roberts & Robin, 2000). Romero et al. (2012) found that

individuals higher in Openness and Agreeableness were likely to have intrinsic goals related to self-growth. Emotional Stability and Extraversion were related to approach-avoidance goals and mediated the relationship of goals and subjective well-being (Heller, Komar, & Lee, 2007). Individuals' life goals were most affected by higher levels of emotional stability, optimism, and external locus of control in a German study by Rammstedt (2007). It is important to note that the above-noted studies focused on prediction of broad, overall categories of goals from Big Five traits; it is not known how specific goals (such as purchasing a house or graduating from college) are correlated with these traits. Further, the above-noted work has been conducted on non-offender samples; there are currently no studies that have examined associations between goals and personality within an offender population.

Locus Of Control

Like Maruna's (2001) discovery of perceived control in offenders, many psychologists have acknowledged the importance of locus of control in different outcomes. Julian Rotter (1966) coined the concept of locus of control (LOC). He explained that an internal LOC is when an individual believes that his or her life events are determined by his or her own behaviors or characteristics. In contrast, an external LOC is when an individual believes that events in his/her life are out of his/her control or as a result of luck or destiny. Individuals' LOC can affect global areas of their lives, from their career to their relationships. In a series of studies, Rotter (1966) found that people with an internal LOC are less influenced by external stimuli, more apt to work towards and focus on achievements, and take steps to improve their situation.

Due to the nature of LOC, it is an important variable to consider when studying offender populations, particularly within the context of evaluating effectiveness of risk-based versus needs-based rehabilitation programs. Lazarus and Folkman (1984) found that individuals with a high internal LOC are more persistent in attaining their life goals and have better coping skills. In contrast, external LOC can be a detrimental factor in the search for a good life and rehabilitation. Majewski (2008) found that an external LOC can contribute to criminal behavior and several studies have shown that juvenile offenders are more likely to have an external LOC (Baguena & Diaz, 1991; Nair, 1994; Powell & Rosen, 1999; Shaw & Scott, 1991). Multiple researchers have looked at LOC in relation to therapy outcome, attitudes of the self, sexual offenses, and violent offenses. The majority of the existing literature lends support to the idea that an external LOC is more prevalent in offenders and leads to less successful treatment. External LOC is negatively correlated with a high self-concept (Friedberg, 1982), more likely to be seen in convicted offenders with intellectual disabilities (Goodman, Leggett, & Garrett, 2007), and seen more often in violent and sexual offenders (Beck-Sander, 1995). Mason (1998) found that when juveniles are involved in aggressive acts, they had decreased self-esteem and a more external LOC. Draycott (2012) found LOC moderated the relationships of dissonance, resistance, and commitment to therapy in an offender sample; the effects of LOC proved to be complicated and dependent on several different combinations of these relationships. LOC can also predict cooperation and success in treatment; external LOC predicts less cooperation and success in treatment whereas internal LOC predicts the opposite outcome (Page & Scalora, 2004). One study found that an internal LOC prior to

treatment for child sexual abusers predicted a better treatment outcome and LOC appeared to become more internal for those who benefited from treatment (Fisher, Beech, & Browne, 1998). LOC is important because it can determine how an individual will respond to treatment as well as what treatment may work best for them. LOC has been shown to become more internal through treatment and internal LOC has also been related with better outcomes. Assessing LOC in offenders can be a beneficial tool for professionals developing and implementing rehabilitation programs.

Self-Esteem

In past research (specifically criminological research), the construct of self-esteem has been shown to have an effect on several different outcome variables (Boden, Fergusson, & Horwood, 2008; Oser, 2006; Woessner & Schnieder, 2013). While there has been some debate on this construct in the field of psychology, it is important to consider given its influence in past research with offender populations.

Self-esteem is important, in that it likely predicts goals. Zuckerman (1985) found that women who were more confident in activities that are commonly male-dominated reported career goals and higher-education goals as more important; for men, self-esteem and interpersonal abilities predicted career goals. Lower self-esteem was associated with more extrinsic goals (Kasser & Ryan, 2001). There have also been studies examining how self-esteem relates to intrapersonal factors, like personality and LOC. Self-esteem has been shown to correlate with Big-Five personality traits in several ways. In fact, Big-Five traits accounted for 34% of the variance in self-esteem in a broad and diverse population. Individuals with high self-esteem tended to be higher in Emotional Stability,

Extraversion, and Conscientiousness. The results appeared to hold true when accounting for many different characteristics, including age, sex, and level of education (Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001). Judge, Erez, Bono and Thoresen (2002) reported high correlations between self-esteem, LOC, Emotional Stability, and generalized self-efficacy, suggesting they may all be measuring some higher-order construct. However, self-esteem was found to have weak to moderate correlations with Multidimensional LOC scale in a group of incarcerated sex offenders, suggesting that they are two different constructs (Huntley, Palmer, & Wakeling, 2012). In a study more closely related to the current study, higher levels of self-esteem and an internal LOC were more likely to be found in prisoners on work release than in incarcerated prisoners (Blatier, 2000).

Offender Populations in Research

Research mentioned previously has been done with juvenile offenders and sex offenders; this is the most commonly researched offender population while other offender populations have not received as much attention. These other offender populations consist of prison inmates, adult jail inmates, and residential correctional offenders serving supervisory sentences. In this study, a residential offender sample will be used because of the urgency and importance of their rehabilitation. Examining their life goals and desires is a pertinent topic because they are in the process of transitioning back into society and may have begun thinking about what they want for their lives. There are several past studies that have looked at residential offenders. Only the prevalence and make-up of mental illness (Way, Abreu, Ramirez-Romero, Aziz, & Sawyer, 2007) and the success of

continuous communications training (Lerch, Viglione, Eley, & James-Andrews, 2011) have been investigated in residential offenders. Butzin and colleagues have examined drug use and drug treatment among offenders transitioning back into the community; overall, they found that work release paired with a treatment program were more beneficial than just work release alone (Butzin, Martin, & Inciardi, 2005; Butzin, O'Connell, Martin, & Inciardi, 2006; McCollister, et al., 2003).

While there have been no previous studies examining the influence of LOC and personality traits on life goals in a residential offender population, one previous study did investigate the differences in LOC, causal attributions, and self-esteem between those on community work release and those who were incarcerated. Overall, it was discovered that individuals on work release reported a more internal LOC and higher levels of self-esteem than those who were incarcerated (Blatier, 2000). These findings pave the way for the current study because one can infer that individuals in a residential correctional facility who are working in the community may have more of a reason to take control of their own lives and make plans for their future. The desires and goals for one's life is an interesting and important topic to investigate with offenders to determine what their motivations are and how to tailor the treatments to best suit them.

Motivation Assessment in Forensic Settings

Measuring Motivation in Offenders

A challenge in offender research is finding appropriate assessment tools for the population. Due to their history of behavior and current living situation, many instruments developed for the general population do not apply to offenders. There have

not been many motivation assessment tools that have proven useful in forensic settings, let alone tools to measure these different sources of motivation or life goals in particular. However, researchers have worked to develop several general measures for the assessment of motivation which are being tested in the offender population.

Personal Concerns Inventory-Offender Adaptation

The original personal concerns inventory. The original Personal Concerns Inventory (PCI; Cox & Klinger, 2004) was developed to measure motivation for treatment among individuals with addiction problems, such as alcoholism. The PCI addresses several life areas including household matters, interpersonal matters, employment and education matters, spiritual and intrapersonal matters, and substance abuse matters. Respondents are asked to choose which areas are most important to them; they list their concerns or aspirations, and then are asked to rate each one on several different aspects that examine how they perceive the goal. It has been used primarily as a tool to build interventions for individuals with substance abuse problems, but may also be used to make individuals' goals more salient to them. The inventory loads on two factors; adaptive motivation (AM) and maladaptive motivation (MM). AM is a relatively stable construct that includes importance of, achievability of, and control over goals. MM is more of a fluid construct that includes unhappiness from goal success and alcohol hindering goal achievements (focusing on the negative aspects of their goals). Not surprisingly, higher scores on the maladaptive motivation factor predict reduced commitment to one's identified goals (Sellen, McMurran, Theodosi, Cox, & Klinger, 2006).

Personal concerns inventory-offender adaptation. The purpose of Sellen, McMurran, Theodosi, Cox, and Klinger's (2009) research was to adapt the PCI for use in correctional settings with the intent of identifying positive and negative motivational profiles in that population. Two life areas were added to the PCI in order to tailor it for the offender population; these included identifying offending behavior and current living arrangements. Life areas relating to substance abuse were removed. The Personal Concerns Inventory-Offender Adaptation (PCI-OA; Sellen et al., 2009) is a motivational assessment tool developed specifically for an offender population. The inventory was developed and tested originally in the United Kingdom on incarcerated men (Sellen et al., 2009). Confusion existed with this adaption of the PCI when offenders were asked to rate how their offending behavior would impact their goals. Participants considered their offending behavior to be detrimental to their goals; however, they reported that being in prison offered them positive experiences like training programs and "time to think." Therefore, they could appreciate how their offending behavior leading to prison positively impacted their pursuit of their life goals, this caused them to rate their offending behavior as helping them achieve their life goals. The developers took several steps to remedy this issue including adding an item regarding the effects of their prison sentence. One study found that offenders cited housing and employment as their most salient goals (Campbell, Sellen, & McMurran, 2010).

The original PCI measure was shown to have slightly better psychometric properties than the revised PCI-OA. However, it is important to note that the PCI-OA targets a more specific population (Sellen et al., 2009) in which these constructs may be

more difficult to measure. The life areas addressed by the PCI-OA are similar to those addressed by the original PCI, but two areas (my offending behavior and current living arrangements) were added to tailor the measure to the offender's current situation.

Adaptive and maladaptive motivational profiles, as well as lack of direction, are considered when interpreting an individual's response; these are the three factors found in the PCI-OA (Sellen et al., 2009). The PCI-OA attempts to measure goal attainment in offenders by identifying what their concerns and aspirations are for different aspects of their lives. It is unclear if the PCI and PCI-OA are best used as measures of motivation or as instruments to enhance motivation (Sellen et al, 2006). Participants acknowledged that the instrument allowed them to break down the issues they face which made them seem more manageable for that individual therefore acting as a motivational instrument.

A pilot study by Theodosi and McMurran (2006) lent support to the idea of the PCI-OA as a motivational tool in treatment. They studied a group of incarcerated sex offenders who refused involvement in sex offender treatment programs; after giving them the PCI-OA, respondents were 0.6 times more likely to show positive attitudes towards treatment than those who were not given the PCI-OA.

In a follow up study on the PCI-OA, McMurran et al. (2008) looked at the current concerns of male prisoners to see if these concerns matched the ones they were being rehabilitated for. The majority of concerns were in regards to *self-changes*, which mostly encompassed self-control (impulsivity control) and self-improvements (increasing all aspects of health). *Employment and finances; partner, family and relatives; and education and training* rounded out the top four concerns for this group of offenders

(McMurran et al., 2008). These concerns aligned with concerns being presented in their rehabilitation services; however, the question remains whether offenders' concerns were the product of the concerns presented to them by treatment professionals or based on their own personal concerns. McMurran et al. (2008) noted that the PCI-OA is a good tool for motivating offenders to come up with their own goals according to their values, and it could be a way to evaluate treatment effectiveness in the offender population.

It would be beneficial to gather more support on distinguishing the best use for the PCI-OA and, whether it be a way to motivate individuals or a way to measure motivation. In order for the PCI-OA to be used more commonly in forensic settings, evaluation of the psychometric properties should continue. It shows promise in being a beneficial tool for research assessing motivation in offenders. It would also be beneficial to evaluate the utility of the PCI-OA in different groups, as it has been developed and researched only with primarily white, British, males (Campbell et al., 2010; McMurran et al., 2008; Sellen et al., 2006; Sellen et al., 2009; Theodosi & McMurran, 2006).

Assessing offenders' life goals is an aspect of research that has been relatively untouched. This gap in the literature and the field of psychological assessment leaves much to be done for the professionals who wish to tackle motivation assessment in forensic populations. Not only is there a need for tools to measure life goals in offenders but there is a critical need for research that examines how intrapersonal factors may influence their life goals.

CHAPTER 3

CURRENT STUDY

The purpose of the current study is to evaluate life goals in offenders and how these goals relate to the Big-Five personality traits and LOC. Specifically, the types of goals reported and the perception of these goals are expected to be influenced by LOC and personality traits. Semi-structured interviews were conducted with a residential offender sample to collect information pertaining to the research questions.

To measure life goals in this sample, the PCI-OA was employed. This scale requires interviewees to list current important life goals. After doing so, they rated different aspects of each goal. First, they rated each goal's importance and their commitment to that goal. They were asked to identify strategies that can be used to achieve each goal, and also the likelihood of achievement. They were instructed to rate key emotions tied to each goal; both positive and negative emotions experienced while considering achievement of each goal. Finally, they were asked to reflect on their perceived timeline for attaining the goal, and how they perceive their offending behaviors will help or interfere with each goal. To measure personality, a commonly-used self-report measure of the Big Five personality traits was administered. Self-esteem and LOC were also measured.

The PCI-OA offers 14 categories in which participants can choose as an area of life that they have goals for. To simplify the analyses, these categories were grouped into five different types of goals; interpersonal goals, achievement goals, creative goals,

personal growth goals, and material goals. These categories are in line with groupings from previous studies (Roberts & Robins, 2000).

It was hypothesized that, after controlling for preexisting levels of self-esteem, the types of goals reported were expected to vary according to personality types. Specifically, hypothesis 1a stated that participants with higher levels of Agreeableness would report interpersonal goals compared to those with lower levels of the trait. Higher levels of Conscientiousness were expected to predict the presence of achievement goals (1b). It was anticipated that participants with higher levels of Openness would report more creative goals (1c) and personal growth goals (1d). Finally, participants who reported lower levels of emotional stability were expected to report more extrinsic goals, such as material goals (1e).

Hypothesis 2 stated that the perception of these life goals would be influenced by LOC and personality traits. Specifically, higher levels of conscientiousness, extraversion, and emotional stability were expected to predict higher scores on the Adaptive Motivation (AM) subscale of the PCI-OA.

Method

Participants

The participants in this study were 76 adult males ($M = 32.18$, $SD = 10.99$, range = 20 to 79) who currently reside in a residential correctional facility in Waterloo, IA. Many of these residents were on parole (4, 5.2%) or probation (28, 37%) and transitioning back into the community after incarceration. Some residents were on work release (28, 37%) but still serving their prison sentence while residing in the residential

facility, while others were under some other special supervisory sentence (4, 5.2%) or involved in a program for drinking and driving charges (12, 16%).

Administrators at a residential correctional facility approved the interviews of their residents for the purposes of this study, and supplied a letter of approval (see Appendix B, letter dated April 11, 2013) for university IRB approval of the study. This facility houses approximately 150 residents, around 70% male and 30% female, ranging in age from 18 to 80. The majority of residents are between the ages of 20 and 40 years old. The facility offers probation and parole services as an alternative to street supervision and/or incarceration. The average length of stay for residents is 2.70 months. Most of the residents have jobs in the community and are involved in programs within the facility.

Power for this study was determined a priori by using an effect size of .32 (based on Roberts & Robins, 2000). A Bonferroni correction was factored into power analyses, to control for the probability of finding significant results simply due to chance because of multiple hypotheses; based on this, it was discovered that a sample size of 183 participants¹ were needed to ensure adequate power to evaluate relationships between variables.

Measures

Personal Concerns Inventory- Offender Adaptation. The PCI-OA (see Appendix C) assesses life goals in an offender population. The measure utilizes both qualitative and quantitative items to get a full picture of the reported goals. The first step when taking the

¹ Due to time constraints this sample size was not achieved. 76 men participated in the study over the course of four months.

measure is for the offender to identify which categories that he or she has goals for. There are 14 goal categories evaluated by the PCI-OA, which include the following: ‘home and household matters,’ ‘employment and finances,’ ‘partner, family, and relative,’ ‘friends and acquaintances,’ ‘love, intimacy, and sexual matters,’ ‘self changes,’ ‘education and training,’ ‘health and medical matters,’ ‘substance use,’ ‘spiritual matters,’ ‘hobbies, pastimes, and recreation,’ ‘my offending behavior,’ ‘current living arrangements,’ and ‘other areas’. The offender is then asked to write several goals that he or she has for each category that he chose in the previous section, and to rate different aspects of noted goals on a scale from 0 (*not important at all*) to 10 (*very important*). Rated aspects on the PCI-OA include importance of the goal, likelihood of obtaining the goal, control over obtaining the goal, do they know what steps to take to obtain the goal, how happy they would feel if they obtained the goal, how unhappy they would feel upon obtaining the goal, commitment to obtain the goal, how long it will take to obtain the goal, and if their offending behavior will help and/or hurt their chances of obtaining the goal.

Sellen et al. (2009) used an exploratory principal components analysis to identify three factors on the PCI-OA aspect ratings: Adaptive Motivation ($\alpha = 0.71$), Maladaptive Motivation ($\alpha = 0.55$), and Lack of Direction ($\alpha = 0.36$). The Adaptive Motivation factor was the only structurally strong factor; thus, it will be the only factor evaluated within the current study. In examining concurrent validity the AM scale was found to be significantly positively correlated to self-related internal motivation and the “action stage” in the stages of change model. Predictive validity was evaluated using reconviction data; it was found that none of the factors predicted reconviction, indicating

that the predictive validity of this instrument for recidivism is poor (Sellen et al, 2009).

The internal consistency estimate for the AM scale in this study was good ($\alpha = .78$).

International Personality Item Pool Shortened Big 5 Questionnaire (IPIP; Goldberg, 1999). The IPIP is a publically available, 50-item questionnaire used to measure Big-Five factor markers (see Appendix D). The 50 items measure five factors: Openness to Experience (“I am quick to understand things”), Conscientiousness (“I follow a schedule”), Extraversion (“I don’t mind being the center of attention”), Agreeableness (“I take time out for others”), and Neuroticism, or low Emotional Stability, (“I have frequent mood swings”). Each item is rated on a 1 (*very inaccurate*) to 5 (*very accurate*) scale. Some items are reverse-scored within each trait factor. Factor indices (averages) allowed for a quantification of traits, with higher scores representing higher levels of the given trait.

The average reliability coefficient across all of the data sets tested in development of this measure was high ($\alpha = .93$) (Goldberg, 1999). In a study by Gow, Whiteman, Pattie, and Deary (2005), sufficient reliability coefficients for the five factors were reported; Extraversion ($\alpha = .84$), Agreeableness ($\alpha = .68$), Conscientiousness ($\alpha = .77$), Neuroticism ($\alpha = .87$), and Openness ($\alpha = .73$). Reliability coefficients were slightly lower for this study but all were at least acceptable; Extraversion ($\alpha = .78$), Agreeableness ($\alpha = .76$), Conscientiousness ($\alpha = .70$), Neuroticism ($\alpha = .81$), and Openness ($\alpha = .69$). Gow et al. 2005 also found that the IPIP scales are highly correlated with scales from two broadly accepted measure of the Big-Five factors (NEO-FFI and the EPQ-R) . Correlations

among the five factors was low (average intercorrelation coefficient = 0.25; Gow et al., 2005), suggesting that the five factors do indeed measure separate traits.

Multidimensional Locus of Control Scale (Levenson, 1973). This is a multidimensional, 24-item scale (see Appendix E) that evaluates aspects of LOC by measuring three facets: internal LOC ($\alpha = .67$, 8.4% of variance), powerful others ($\alpha = .82$, 11.5% of variance), and chance ($\alpha = .79$, 12% of variance). Respondents are instructed to rate each item (e.g., “When I make plans, I am almost certain to make them work”) on a scale of +3 to -3; positive item ratings indicate degree of agreement and negative item ratings reflect degree of disagreement. The internal LOC scale was assessed in this study as external LOC was not a variable included in the proposed hypotheses. The current study internal consistency estimates were found to be $\alpha = .56$ for internal LOC, $\alpha = .73$ for powerful others, and $\alpha = .76$ for chance subscales.

Rosenberg Self-Esteem Scale (Rosenberg, 1989). This 10-item scale measures the construct of self-esteem (see Appendix F). The Rosenberg Self-esteem Scale includes 10 items comprised of both positive (e.g., “I feel that I am a person of worth, at least on an equal plane with others”) and negative (e.g., “All in all, I am inclined to feel that I am a failure”) items. Participants are asked to rate each item on a 1 (*strongly agree*) to 4 (*strongly disagree*) scale; lower scores indicated lower self-esteem.

Rosenberg (1989) reported this scale showing high internal consistency among items ($\alpha = .92$), with test re-test reliability of .85-.88 over a 2-week period. Further, he reported high correlations between the Rosenberg Self-esteem scale and other similar measures of self-esteem (e.g. Coopersmith Self-Esteem Inventory). A slightly lower

reliability coefficient was found for in this study ($\alpha = .69$). As one would predict, lower scores on the self-esteem measure were correlated with higher reports of depressive symptoms in a clinical sample (Rosenberg, 1989).

Procedure

Recruitment of residents was conducted by the primary investigator (PI) in order to comply with IRB requirements. Administrators posted announcements one week prior to the PI's visits. Interviews were conducted by the PI and a graduate research assistant over a 4-month period (August 2013- December 2013). The PI visited the facility approximately three days prior to the first interview date (on August 1, 2013) to recruit participants. Subsequently, the PI kept a recruitment list on dates during which interviews were being conducted. Interviews took place on August 1st, September 13th, November 4th, December 17th, December 18th, and December 19th, 2013. The PI conducted 50 interviews (66% of total interviews) and the graduate research assistant conducted 26 interviews (34% of total interviews). Both interviewers were in separate rooms to ensure the privacy of the participants. The interview rooms were chosen by the facility administration to comply with facility safety requirements.

A semi-structured interview was conducted with each participant in order to maintain his privacy and clarify any confusing items for him. The first part of the interview consisted of the PCI-OA, where the participants were encouraged to think about and rate their life goals. The participants were able to write their goals and fill out the rating scale themselves or, depending on the competency level and engagement of the participant, the researcher could administer the measure interview style and fill out the

given responses.² Participants were asked to choose three categories in which they have goals, and to only document the most salient goal within each of these identified categories. After documenting each goal, they were asked to provide aspect ratings (e.g., importance, likelihood, commitment, etc.). This procedure was utilized for efficiency.³ After goals were identified and rated, the participant was given a short packet of questionnaires to complete; this packet included the IPIP, the Multidimensional Locus of Control scale, and the Rosenberg Self-Esteem Scale. Participants took approximately 45 minutes to complete the entire set of materials (including both goal identification using the PCI-OA and the pack of questionnaires); however, some took more or less time depending on their competency and engagement. At the conclusion of the meeting, the interviewer debriefed the participants by discussing the study with them and soliciting their feedback and perspectives on the study. Each participant was then given a debriefing sheet that includes the purpose of the study, contact information, and information on community mental health services that are available to them.

Analyses

For the first set of hypotheses the relationship between types of goals and Big Five personality traits was investigated. Certain specific predictions are made about the presence or absence of certain stated goals from the PCI-OA based on trait levels.

Hypothesis 1a stated higher scores on the Agreeableness subscale would predict the presence of interpersonal goals. Second, higher scores on the Conscientiousness subscale

² Only one participant in the study required the measures to be administered to him interview style due to reading difficulties.

³ In a treatment setting the PCI-OA would be used in a more comprehensive way, allowing the offender to choose all areas of life that he/she has goals for and listing up to six goals for each area of life.

would predict the presence of achievement goals (1b). Third, higher scores on the Openness to Experience subscale would predict the presence of creative (1c) or personal growth goals (1d). Finally, lower scores on Emotional Stability would predict the presence of extrinsic goals (1e). The PCI-OA was used to measure types of goals. Qualitative items from the PCI-OA were coded by three coders into one of five goal-types including: interpersonal, achievement, creative, personal growth, and material/extrinsic. The five broad personality trait categories were measured by the IPIP personality questionnaire subscales (Goldberg, 1992). Internal LOC was measured by the internal scale of Multidimensional LOC scale (Levenson & Miller, 1976) and self-esteem was measured by the 10-item Rosenberg self-esteem scale (Rosenberg, 1989). After controlling for pre-existing levels of self-esteem, five hierarchical logistic regression analyses were conducted to evaluate the above-noted predictions.

For my second hypothesis (2), I examined how high scores on certain personality traits and LOC predicted scores on the adaptive motivation (AM) scale of the PCI-OA, taking into consideration the effects of age and self-esteem. Specifically, higher scores on Emotional Stability, Conscientiousness, and Extraversion and a more internal LOC were expected to predict higher scores on the AM subscale of the PCI-OA. After controlling for pre-existing levels of self-esteem and age, a hierarchical multiple regression analysis was conducted to see if internal LOC and personality traits predict the perception of life goals.

CHAPTER 4

RESULTS AND DISCUSSION

Results

Data in this study were analyzed using SPSS for Windows. There were no aggregate missing data points. However, there were 25 item data points that were missing; t-tests were run to compare participants that did have missing data versus not, and no significant differences were found on key variables. Therefore, predictor variables were calculated using averages of the variable scales. Data from 76 men were available for this analysis. Descriptive statistics were run to analyze the skewness and kurtosis of the key variables; all variables fell within the normal range. Means, standard deviations, and reliabilities for personality traits, internal LOC, and adaptive motivation score are reported in Table A1.

There were several significant correlations found between variables, as seen in Table A1. Openness was significantly, positively correlated with Agreeableness, Conscientiousness, Internal LOC, and Self-esteem. A significant, positive correlation was also found between Internal LOC and Conscientiousness and Self-esteem. Adaptive Motivation was significantly correlated with Emotional Stability. Finally, age was significantly, negatively correlated with Extraversion. Due to these multiple significant correlations between variables, several steps were taken before data was analyzed.

Predictors were centered prior to analyses to avoid multicollinearity (Afshartous & Preston, 2011). To evaluate the potential moderating effects of internal LOC, each centered personality trait and internal LOC scores were multiplied together in order to obtain an interaction term; this aided in reducing any high correlations that existed

between variables for the regression equations that were run (Afshartous & Preston, 2011).

Three raters were utilized to code reported goals identified using the PCI-OA into one of five categories. For this data set, the inter-rater reliability was not satisfactory for one of the raters (Rater 2), because the resulting Kappa coefficients were less than the commonly applied criteria of .70. However, inter-rater reliability between two of the raters (Raters 1 and 3) could be concluded to be satisfactory as the obtained Kappa is great than the commonly applied criteria of .70. Table A2 shows kappa coefficients between each rater.

In this sample, participants chose three types of goals which fell into one of five categories: interpersonal goals, achievement goals, creative goals, personal growth goals, or material goals. According to Tabachnick and Fidell (1996), each cell (presence versus absence) should contain at least 20% of responses. The percentage that each type of goal was reported appears in Table A3. As reported in Table A3, achievement goals, creative goals, and material goals had less than 20% in either the presence or absence cell. Logistic regression analyses for these outcome variables are reported below; however, results for these variables should be interpreted with caution due to this limitation of the skewed distribution of responses.

Prediction of Goal Types

For the first set of hypotheses, hierarchical logistic regression analysis were conducted, with self-esteem entered in the first step of the equation in order to control for

its effects on the hypothesized predictive abilities of specific personality traits and locus of control on goals.

Interpersonal Goals (Hypothesis 1a). A hierarchical logistic regression analysis was performed on the presence of interpersonal goals as the outcome variable using three predictors: Agreeableness, internal LOC, and self-esteem. An interaction term (Agreeableness x internal LOC) was also included, to evaluate the potential moderating effect of internal LOC in the predicted relationship between Agreeableness and interpersonal goals. Self-esteem was entered into the first step, in order to control for its effect in the model, given the above-noted correlations between self-esteem and personality traits.

A test of the model with only self-esteem entered into the first step was better able to predict the presence of interpersonal goals than the constant $\chi^2(1, N = 76) = 3.97, p = .05$. However, the incremental inclusion of internal LOC and Agreeableness was not statistically significant, $\chi^2(3, N = 76) = 4.46, p = .22$. Further, the test of the full model with all three predictors plus the interaction term against a constant-only model was no longer significant, $\chi^2(4, N = 76) = 8.43, p = .08$. This indicates that the combination of agreeableness, internal locus of control, and self-esteem were not able to predict the presence of interpersonal goals better than the constant only model. Further, internal LOC did not appear to moderate the prediction of interpersonal goals from Agreeableness; as noted in Table A4, the regression weight was not significant, $b = .23 (SE = .05)$, Wald = .13, $p = .72$. The variance in the presence of interpersonal goals was small with Nagelkerke $R^2 = .14$ (Field, 2005). Prediction success of the model was poor, with the

equation accurately classifying 70.7% for those who did not report an interpersonal goal, and accurately classifying 57.1% for those who did report an interpersonal goal correctly predicted, for an overall success rate of 64.5%. Table A4 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the three predictors. According to the Wald criterion, none of the factors reliably predicted the presence of interpersonal goals.

Achievement Goals (Hypothesis 1b). A logistic regression analysis was performed on the presence of achievement goals as the outcome variable, using three predictors: Conscientiousness, internal LOC, and self-esteem. An interaction term (Conscientiousness x internal LOC) was also included, to evaluate the potential moderating effect of internal LOC in the predicted relationship between Conscientiousness and achievement goals. A test of the model with only self-esteem entered into the first step was unable to predict the presence of achievement goals better than the constant $\chi^2(1, N = 76) = 1.17, p = .28$. The incremental inclusion of internal LOC and Conscientiousness was also not statistically significant, $\chi^2(3, N = 76) = 3.21, p = .36$. Further, the test of the full model with all three predictors against a constant-only model was not significant, $\chi^2(4, N = 76) = 4.38, p = .36$. This indicates that the combination of Conscientiousness, internal LOC, and self-esteem were not able to predict the presence of achievement goals better than the constant only model. The variance in the presence of achievement goals was small with Nagelkerke $R^2 = .09$. Prediction success of the model was poor with 0% for those who did not report an achievement goal and 100% for those who did report an achievement goal correctly predicted, for an overall

success rate of 82.9%.⁴ Table A5 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the three predictors. According to the Wald criterion, none of the factors reliably predicted the presence of interpersonal goals.

Creative Goals (1c). A logistic regression analysis was performed on the presence of creative goals as outcome and three additional predictors: openness to experience, internal locus of control, and self-esteem. An interaction term (Openness x internal LOC) was also included, to evaluate the potential moderating effect of internal LOC in the predicted relationship between Openness and creative goals. A test of the model with only self-esteem entered into the first step was unable to predict the presence of creative goals better than the constant $\chi^2(1, N = 76) = .07, p = .80$. The incremental inclusion of internal LOC and Openness was also not statistically significant, $\chi^2(3, N = 76) = 3.21, p = .36$. Further, the test of the full model with all three predictors against a constant-only model was not significant, $\chi^2(4, N = 76) = 4.38, p = .36$. This indicates that the combination of Openness, internal LOC, and self-esteem were not able to predict the presence of creative goals better than the constant only model. The variance in the presence of creative goals was small with Nagelkerke $R^2 = .09$. Prediction success was poor with 100% for those who did not report a creative goal and 0% for those who did report a creative goal correctly predicted, for an overall success rate of 96.1%.⁵ Table A6 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals

⁴ These results indicate that the model with the predictors did no better at predicting group membership than the constant only model. This may be due to the low n in each cell (less than 20%).

⁵ These results indicate that the model with the predictors did no better at predicting group membership than the constant only model. This may be due to the low n in each cell (less than 20%).

for odds ratios for each of the three predictors. According to the Wald criterion, none of the factors reliably predicted the presence of creative goals.

Personal Growth Goals (1d). A logistic regression analysis was performed on the presence of personal growth goals as outcome and three additional predictors: Openness, internal LOC, and self-esteem. An interaction term (Openness x internal LOC) was also included, to evaluate the potential moderating effect of internal LOC in the predicted relationship between Openness and personal growth goals. A test of the model with only self-esteem entered into the first step was unable to predict the presence of creative goals better than the constant $\chi^2(1, N = 76) = .1.38, p = .24$. The incremental inclusion of internal LOC and Openness was statistically significant, $\chi^2(3, N = 76) = 14.44, p = .00$. Further, the test of the full model with all three predictors against a constant-only model was also significant, $\chi^2(4, N = 76) = 15.82, p = .00$. This indicates that the combination of Openness, internal LOC, and self-esteem were significantly able to predict the presence of creative goals better than the constant only model. The variance in the presence of personal growth goals was small with Nagelkerke $R^2 = .26$. Prediction success was fair with 42.3% for those who did not report a personal growth goal and 90% for those who did report a personal growth goal correctly predicted, for an overall success rate of 73.7%. Table A7 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the three predictors. According to the Wald criterion, internal LOC reliably predicted the presence of personal growth goals ($p = .005$), with self-esteem ($p = .054$) trending towards significance.

Material Goals (1e). An interaction term (Emotional Stability x internal LOC) was also included, to evaluate the potential moderating effect of internal LOC in the predicted relationship between Emotional Stability and material goals. A test of the model with only self-esteem entered into the first step was unable to predict the presence of material goals better than the constant $\chi^2(1, N = 76) = .86, p = .35$. The incremental inclusion of internal LOC and Emotional Stability was also not statistically significant, $\chi^2(3, N = 76) = 2.80, p = .42$. Further, the test of the full model with all three predictors against a constant-only model was not significant, $\chi^2(4, N = 76) = 3.66, p = .45$. This indicates that the combination of Emotional Stability, internal LOC, and self-esteem were not able to predict the presence of creative goals better than the constant only model. The variance in the presence of creative goals was small with Nagelkerke $R^2 = .08$. Prediction success was poor with 100% for those who did not report a material goal and 0% for those who did report a material goal correctly predicted, for an overall success rate of 84.2%.¹ Table A8 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the three predictors. According to the Wald criterion, none of the factors reliably predicted the presence of material goals.

Prediction of Goal Perception (2)

For the second hypothesis, hierarchical multiple regression analysis was conducted, with self-esteem and age entered in the first step of the equation in order to

control for its effects on the hypothesized prediction of goal perception (AM scores) from personality traits and internal LOC.

Table A9 displays the regression coefficients (b), standard error (SE_b), 95% confidence intervals (CI ; lower & upper), t -statistic (t), and significance level (p). The overall R was not significantly different from zero in step 1, $F(2, 73) = 1.78, p = .18, r^2 = .05$ and was not significantly different from zero in step 2, $F(4, 69) = 1.89, p = .10, r^2 = .14$. This indicates that the model did not significantly predict AM scores. 18.8% of the variability in scores on the AM scale was accounted for by the predictor variables.

It is important to note from Table A9 that Emotional Stability significantly contributed to prediction of AM scores, even though the overall model was not significant. It was likely the case that there was not enough power to evaluate the above-noted full model (inclusive of six predictors), given the ratio of predictors to data points (i.e., the sample size was not large enough). As noted in Table A1, Emotional Stability was positively correlated with self-esteem at $r(74) = .28, p = .01$. Therefore, an exploratory linear regression was run to evaluate the effect of Emotional Stability on goal perception, with Self-Esteem entered into the first step of the model as a potential covariate and Emotional Stability entered into the second step. The overall R was not significantly different from zero in step 1, $F(1, 74) = 3.58, p = .06, r^2 = .05$, suggesting that self-esteem did not significantly predict AM scores. However, when Emotional Stability was added to the second step of the model, the overall model became significantly different from zero, $F(2, 73) = 4.61, p = .01, r^2 = .11$. Further, Emotional Stability was a significant predictor of AM scores within this second step, $b = .286, (SE = .12), t = 2.33$. This indicates that the

model with only self-esteem entered in did not significantly predict AM scores. However, when Emotional Stability was added to the second step the model did significantly predict AM scores.

Discussion

Discussion of Results

This study examined the relationship between intrapersonal factors, such as LOC, personality traits, and self-esteem on reported life goals in a residential offender population. Previous research in the field, using non-forensic samples, found that key personality traits predict certain kinds of life goals (Ludtke et al., 2009; Richards, 1966; Roberts & Robins, 2000; Roberts, O'Donnell, & Robins, 2004; Romero et al, 2012). Specifically, high scores on Openness predicted personal growth and creative goals, Conscientiousness predicted achievement goals, low Emotional Stability predicted material goals, and Agreeableness predicted interpersonal goals. Surprisingly, the findings from this study did not support previously discovered relationships. However, these results did show that higher levels of Openness and an internal LOC predicted the presence of personal growth goals for this offender sample. This study also found that Emotional Stability was the strongest predictor of high AM scores.

As was mentioned previously, self-esteem has been a commonly assessed variable in criminology research throughout the years. Previous research has shown that self-esteem can be predictive of life goals depending on different personal characteristics (Kasser & Ryan, 2001; Zuckerman, 1985). Self-esteem has been a long studied construct in psychology (Robins, Hendin, & Trzesniewski, 2001); however, it has been called a

“myth” by others (Baumeister, Campbell, Kruger, & Vohs, 2005; Hewitt, 1998). In highlighting some of the differing general hypotheses that have led to the this disagreement, Oser (2006) identified two positions involving self-esteem that have opposite views; the first that reduced self-esteem was associated with more crime, and the second showing a positive relationship between crime rates and self-esteem. Due to the unclear role of self-esteem in the forensic literature, it was included as a covariate when running analyses. However, self-esteem was not an influential predictor of goals or goal perception within the current study.

Age was also included as a covariate in goal perception analyses because it has been found to impact criminal behavior and attitudes; researchers have reported that individuals show reductions in criminality as they age (Glaser, 1964; Sampson & Laub, 2003). When entering age in the regression analysis of goal perception, it did not have a significant impact on the outcome.

One important challenge with this data was the lack of variability in responses within certain outcome variables/goal types. Specifically, achievement goals, creative goals, and material goals had less than 20% in either the presence or absence cell. The low rates of presence/absence within these variables results in an inability to test key hypotheses.

Implications

While the results from this study are inconclusive about how intrapersonal factors affect the life goals chosen by offenders, it is still important to evaluate life goals for offenders when it comes to treatment planning. While life goals are important to assess in

a treatment program in order to align it to what the offender in treatment may be striving for, this study shows that personality traits and other factors do not have a significant impact on goal types chosen. With the exception of Emotional Stability, which did impart an effect on goal perception and Openness, on personal growth goal types in the current study, evaluating the impact of intrapersonal traits on goal types and their salience may not be as important as studying the overall treatment influences of goal types themselves. Assessing offenders' personality and other intrapersonal factors may be unnecessary when planning treatment generally.

A discovery that was made during this study was the difference between a life goal and a value and how easily these two constructs can be confused. For instance, "Buying a house so my family can all live together" could be coded into either material goals (for buying a house) or interpersonal goals (because he identified his family as the reason). This exemplifies the difference between a life goal and its corresponding value; buying a house was his specified life goal, but his family represented the core value for which he has based this life goal. The confusion between goals and values was present in the coding process in this study and may be evidenced by the low Kappa values for Rater 2. Therefore, it could be beneficial to consider an individual's values alongside their life goals, in order to understand them better. Ward and Fortune (2013) include values their *good lives plan* (GLP), first identifying values and then translating these values into a plan of action for respondents' lives. This identification and translation of values is very important; it is hypothesized that this is what was missing from the current study, in participants' conceptualizations of their life goals. It was as if they based their goals off

of their values, but were unable to recognize this; they therefore may not have recognized the importance of the goal. Helping the offenders to identify the values underlying their current life goals is beneficial for the remainder of the treatment. Ward and Fortune (2013) also stressed the importance of helping offenders to determine means to reach their goals, which would not include offending behaviors or other anti-social acts. This intervention was designed in a way that it was “wrapped around” (pg. 40) the values of the offender so that all aspects of the treatment relay back to their stated values.

Identifying both life goals and their underlying values holds implications for treatment in offenders. This is an important component of mindfulness-based therapies with offenders, which calls upon the identification of values as an integral step in the change process (Fletcher & Hayes, 2005). It is argued that identifying values represents an important process in every individual’s life, not only those in treatment or incarcerated. Ward and Fortune (2013) argued that building offenders’ competency when it comes to their values and achieving their goals is what will allow them to live a fulfilling life in the future and not return to a life of incarceration. This view is consistent with Fletcher and Hayes (2005), in that identifying values and assessing current thoughts and behaviors according to one’s values allows the individual to move away from behaviors based on “social compliance, avoidance, or fusion,” (pg. 5) and move towards behaviors based on their values.

This study also found that Emotional Stability was the strongest predictor of adaptive motivation with regard to perception of goals. This means that individuals who are more emotionally stable (or less neurotic) have a more positive, adaptive perspective

on achieving their life goals. It could be possible that targeting the trait of Emotional Stability through participation in emotion regulation therapy could have pronounced benefits for this population. One of the most recent waves of treatment for offenders has focused on emotion regulation by way of mindfulness and acceptance (Gardner & Moore, 2014). Researchers have found that individuals (both offenders and non-offenders) who over-regulate or under-regulate their emotion tended to experience negative behavioral consequences, because they are either trying to avoid experiencing negative emotions or they have a low tolerance for the negative emotions they are feeling (Robertson, Daffern, & Bucks, 2012). It is proposed that emotion regulation could be targeted in therapy, such that one's ability to deal with negative emotions in a healthier way could be targeted as an important outcome of treatment. Robertson et al. (2012) reported three key skills that can be included in treatment to strengthen an individual's regulation of their emotions; these include emotional awareness, emotional acceptance, and proficiency in a variety of emotional regulation strategies. These skills fall in line with other treatments that have become popular within the treatment community, including mindfulness based therapies like Acceptance and Commitment Therapy (ACT). ACT encompasses similar skills to encourage psychological flexibility by eliciting mindfulness and acceptance processes alongside commitment and behavior change processes (Hayes, Levin, Plumb-Villardaga, Villatte, & Pistorello, 2013). Once individuals participating in ACT identify their values, steps are taken for them to evaluate their current behavior and cognitions and determine if it is in line with their values. Making a commitment to their values and changing the way they think and act is another important component of ACT. While ACT and other

mindfulness-based therapies are relatively new in the field of clinical psychology, Dafoe and Stermac (2013) found that these therapies may have value in correctional populations including increasing well-being, and decreasing negative psychological states, substance use, and recidivism. Not only can mindfulness-based therapies target emotion regulation by way of mindfulness and acceptance, they can also help individuals to focus on their values and goals.

The hope is that, by increasing emotional regulation (or stability) and helping offenders to identify their values, we would be able to increase their adaptive motivation. In other words, targeting emotion regulation and value identification in treatment may help individuals to positively envision and achieve their life goals and their ability to live a fulfilling life. Researchers have reported that individuals are more likely to achieve their goals when they envision the process it will take to achieve the goal, including any setbacks or stressful events as opposed to just having achieved the goal (Taylor, Pham, Rivkin, & Amor, 1998). This allows for identification of several strategies for which to build up treatment programs utilizing life goals, which could be beneficial to correctional populations.

Limitations

All studies pose inherent challenges in the collection of data to evaluate key hypotheses, and this one was no exception. First, it is clear that respondents were confused on the distinction between life goals and values. Several participants often reported life goals that were two-fold, in order to include the value that their goal was based on. For instance, reporting “I want to buy a house so my family can all live

together” identified this man’s goals as well as the importance his family, as the value, played in choosing the goal. As mentioned earlier, it was difficult to differentiate between the life goal and the value with which the life goal was based on; this made categorizing some goals difficult, thus potentially lowering inter-rater reliability more so than expected. Although coders for this study participated in a training session before coding began, clearer and more specific instructions included in a training session in the future may help to avoid this confusion.

Another discovery that was made during this study is the fact that previously identified categories of goals (Richards, 1966; Roberts & Robins, 2000; Roberts et al., 2004) that worked for non-offender populations may not have worked for this sample. A different categorization of life goal categories would have likely been more useful and relevant for this sample than the goal categories proposed in previous studies. For example, creative goals were underreported in this sample, with only three participants reporting creative life goals. Due to the nature of offenders’ lives, aspirations relating to creativity likely fall by the wayside, especially when they may be focused on more primary needs such as shelter and food (Ward, 2002). More salient for this population are concrete and immediate goals that pertain to getting “back on their feet”; transitioning into the community, finding a place to live, and finding employment. It may have been the case that the process by which goals were collected and coded was less efficient than other strategies. A possible alternative would be offering participants a checklist of more concrete and immediate goals to choose from as opposed to having an open-ended format of reporting life goals.

Previous research has identified goal categories through evaluation of non-offender samples (Ludtke et al., 2009; Richards, 1966; Roberts et al., 2000; Roberts & Robins, 2000). The five categories of goals (interpersonal, achievement, personal growth, creative, and material goals) were found using a factor analytic procedure from reported aspirations used in a German adult and Spanish adult population (Ludtke et al., 2009; Romero et. al, 2012). In several other studies the goal categories were based off of proposed “value domains” of college freshman (Richards, 1966, p. 1286; Roberts & Robins, 2000; Roberts et al., 2004). These value domains were taken from previous literature and focused on values associated with social roles (Rokeach, 1973), work-related values (Hofstede, 1984), and other groupings of values including personal growth, aesthetic (or creative), and hedonistic (or material) values (Allport, Vernon, & Lindzey, 1960; Hogan, Hogan, & Roberts, 1996; Schwartz, 1992). This presents a problem for the current study; this sample was likely very different from the samples used in past research to identify important goal categories. Existent studies that focused on life goals within offender groups did not look specifically at types of life goals. More recent studies evaluating treatment goals for offenders tend to focus more on goal development and accomplishment, rather than on the content of the goals (Lee, Uken, & Sebold, 2007).

A second limitation to this study was the use of the PCI-OA. While it is the only measure of its kind to assess life goals in offenders, it may be more strongly suited for use in treatment as opposed to assessment. The current study results imply that the adaptive motivation scale was not reliably measuring the perception of goals in this sample, as it had with other samples in the past. A concern with this measure was the

confusing nature of some rating scale questions, and this posed some challenges in the study. Specifically, participants often became confused about the ‘happiness’ and ‘unhappiness’ items and scored them differently than they may have otherwise. Interviewers were able to help clarify some of this confusion in the semi-structured interviews; however, this would be an even greater concern if the PCI-OA had been used as a self-report measure for respondents to complete. The PCI-OA was chosen, as a qualitative instrument, to provide structure for the interview and allow for gathering more extensive information on participants’ goals and their perceptions of identified goals.

A psychometric issue that existed in this study was the use of the internal LOC scale measured by the Multidimensional Locus of Control Scale. Given the poor internal consistency estimate found in this study ($\alpha = .56$), it cannot be determined whether this scale was reliably measuring the construct of internal LOC. This scale was selected for use with the sample of residential offenders because of its history of use for forensic populations (Levenson, 1975). However, a more psychometrically sound instrument may be necessary for future research; other existing self-report measures of LOC include Rotter’s Locus of Control Scale (1966) and Nowicki-Strickland Locus of Control Scale (Nowicki & Duke, 1974).

The sample assessed in the current study may not be representative of the overall residential offender population due to the small number of respondents interviewed. While race or ethnicity was not taken into consideration in this study, the racial and ethnic make-up of this sample may be different than that of the overall US residential offender population. Specifically, this sample was extracted from the state of Iowa which

is historically less diverse than many other states or regions of the US. Also, only male offenders were interviewed in this study; this neglects the female offender population completely. It could be possible that some unknown third variable influenced this sample's responses differently than other groups may have responded, possibly due to region, local culture, or facility environment. A restriction of range was evident in scores from this sample for the PCI-OA. Compared to means of items on the rating scales of the PCI-OA from two previous studies (Campbell et al., 2010 & Sellen et al., 2006) the means from the current study tended to be comparable, albeit slightly higher (.5-1 point). However, the standard deviations in scores for this study were substantially smaller than those reported in past studies, suggesting that there was a restriction of range in the PCI-OA responses from the current study sample. Compared to the means of prisoner on work release in a previous study (Blatier, 2000), this sample had a much lower mean of self-esteem, approximately eight points lower. Mean scores from the Multidimensional LOC scale in this sample were similar to those found in previous studies (Levenson, 1973).

Finally, this study lacked statistical power to find significant relationships. Due to time constraints and practicality, only 76 men participated in the study. A power analysis (based off of a .32 effect size; Roberts & Robins, 2000) conducted prior to data collection recommended a sample size of over 100 to find significant results. Therefore, the small sample-size may contribute to a lack of significant relationships found between variables. The found effect sizes in this study were quite low, with most r^2 coefficients less than .10; these are much lower than the effect sizes found in previous research that ranged from .32

to .42 (Roberts & Robins, 2000). Even if the suggested sample size had been met in this study the very small effect sizes may have still prevented any significant findings.

Future Directions

Given that the goal categories evaluated in this study may not have been useful for a group of rehabilitating offenders, future researchers might be able to discover more appropriate goal categories for this unique group of individuals. This group experienced unique external pressures and societal demands, and thus might be experiencing constrained goals (e.g., those relating to primary needs) or very unique goals that are specific to this population. For example, one participant listed “to no longer be looked at as a prisoner” as a life goal. Pooling a large number of goal responses from offender samples and conducting factor analyses on such statements could help to determine more appropriate goal categories.

Another direction for future research in this area could follow the trend of life goals in offenders by examining mental simulation of goal achievement in offenders and how intrapersonal factors affect this process. Mental simulation takes place when an individual acts out an event or a series of events in their mind (Taylor & Schnieder, 1989). Previous research has found that when individuals mentally simulate the processes it takes to reach their goals, they have more positive outcomes congruent with goal achievement (Taylor et al., 1998). The use of mental models, or the process of acting out an event in ones’ mind, has shown to be influenced by intrapersonal factors (e.g. self-esteem, perceived control, and mood); this technique predicts greater motivation and higher grades for college students (Aspinwall & Taylor, 1992). While there has been no

current research focus on mental models of life goals with an offender population, it could be an interesting route to take, especially if these techniques could target more relevant outcomes for this group. Such mental modeling could be utilized in the future, by examining how it affects treatment outcomes, compared to a group in which mental modeling techniques were not used. Intrapersonal factors could be examined as mediators or moderators of the relationship between mental modeling and treatment outcome.

Finally, examining the effects of age, gender, and race on life goals in offenders could be another interesting direction for future research. Gender differences, specifically, have been researched to some extent in offender populations but deserve more attention. Knox, Funk, Elliot, and Bush (1998) determined that women are less likely to believe they'll achieve their goals. Women, in general, often have different concerns than men. Clinkinbeard and Zohra (2012) indicated that female offenders perception on and types of reported goals are influenced by "family obligations, personal relationships, and other gender-specific barriers to success," which is often much different than male offenders' experience (pg. 249). These gender differences in goals chosen by offenders could also hold important implications for gender-specific treatment in offenders.

Conclusion

This study lends partial support to the idea that intrapersonal factors do have some influence on how offenders perceive their life goals and if they choose personal growth goals. Specifically, higher levels of Emotional Stability predicted more adaptive motivation for life goals; further, levels of Openness and internal LOC predicted identification of personal growth goals. The field of forensic treatment could benefit from

utilizing interventions that focus on goals and value identification and targeting

Emotional Stability by way of increasing emotion regulation of negative emotions.

Future research could investigate exactly how utilizing goals and values in treatment can benefit the individual, how personal characteristics like age, gender, and race effect goals chosen, and differentiating what goals and values are truly important to offender versus non-offender groups.

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APPENDIX A

TABLES

Table A1

Descriptive Statistics and Correlations of Key Variables

Variable	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.
1. Extraversion	3.05	.77	-							
2. Agreeableness	3.78	.59	.21	-						
3. Conscientiousness	3.87	.56	.10	.20	-					
4. Emotional Stability	3.05	.83	.15	.156	.18	-				
5. Openness	3.60	.58	.18	.31**	.40**	-.06	-			
6. Internal LOC	35.22	7.29	.04	.14	.24*	.09	.36**	-		
7. Adaptive Motivation	8.78	.88	.18	.14	.14	.31**	.11	.18	-	
8. Age	32.15	11.00	-.24*	.06	.01	.16	-.13	-.05	.00	-
9. Self-Esteem	21.92	5.33	.17	-.09	.35**	.28*	.26*	.27*	.22	-.08

Note. *N*= 76 for all correlations **p*<.05. ***p*<.01.

Table A2

Inter-rater Reliability Coefficients

	Rater 1	Rater 2	Rater 3
Rater 1	-		
Rater 2	.57	-	
Rater 3	.80	.62	-

Table A3

Percentage of Goal Type Reported

Type of Goal	Percentage
Interpersonal goals	46%
Achievement goals	83%
Creative goals	0.04%
Personal Growth goals	66%
Material goals	16%

Table A4

Hierarchical Logistic Regression for Interpersonal Goals

	<i>b</i> (<i>SE</i>)	Wald	<i>p</i>	95% CI for exp <i>b</i>		
				Lower	exp <i>b</i>	Upper
Included						
Step 1						
Constant	-.18 (.24)	.55	.46		.84	
Self Esteem	.92 (.49)	3.55	.06	.964	2.52	6.59
Step 2						
Constant	-2.76 (8.55)	.10	.01		.03	
Self Esteem	.08 (.05)	2.50	.11	.83	2.21	5.88
Agreeableness	-2.48 (2.28)	.01	.91	.01	.78	67.92
Internal LOC	-0.35 (.24)	.02	.16	.86	1.50	2.61
Agree. x Int. LOC	0.23 (0.64)	.13	.72	.44	1.20	3.25

Note: **p* < .05, *N* = 76, Agree. x Int. LOC is the interaction term of Agreeableness x InternalLOC

Table A5

Hierarchical Logistic Regression for Achievement Goals

		<i>b</i> (<i>SE</i>)	Wald	95% CI for exp <i>b</i>			
				<i>p</i>	Lower	exp <i>b</i>	Upper
<u>Included</u>							
Step 1							
	Constant	1.62 (.32)	26.19*	.00		5.05	
	Self-esteem	-.68 (.67)	1.10	.30	.14	.51	1.86
Step 2							
	Constant	4.16(2.47)	2.83	.09		63.91	
	Self Esteem	-.96 (.80)	1.45	.23	.08	.38	1.83
	Conscientiousness	5.58 (3.37)	2.75	.10	.36	265.53	195799.46
	Internal LOC	-.04 (.41)	.01	.93	.43	.96	2.16
	Consc. x Int. LOC	-1.23 (.73)	2.8	.09	.07	.29	1.22

Note: * $p < .05$, $N=76$, Consc. x Int. LOC is the interaction term of Conscientiousness x Internal LOC

Table A6

Hierarchical Logistic Regression for Creative Goals

				95% CI for exp <i>b</i>			
		<i>b</i> (<i>SE</i>)	Wald	<i>p</i>	Lower	exp <i>b</i>	Upper
<u>Included</u>							
Step 1							
	Constant	-3.20 (.60)	28.92*	.00		.04	
	Self-esteem	.30 (1.20)	.06	.80	.13	1.35	14.13
Step 2							
	Constant	-7.71(4.82)	2.56	.11		.00	
	Self Esteem	-.21 (1.23)	.03	.86	.07	.81	8.99
	Openness	3.51 (9.36)	.14	.71	.00	33.40	3123169519.87
	Internal LOC	1.06 (.98)	1.18	.28	.43	2.89	19.59
	Open. x Int. LOC	-.74 (1.86)	.16	.69	.01	.48	18.25

Note: * $p < .05$, $N=76$, Open. x Int. LOC is the interaction term of Openness x Internal LOC

Table A7

Hierarchical Logistic Regression for Personal Growth Goals

		<i>b</i> (<i>SE</i>)	Wald	<i>p</i>	95% CI for exp <i>b</i>		
					Lower	exp <i>b</i>	Upper
Included							
Step 1							
	Constant	.67 (.25)	7.38*	.00	1.94		
	Self-esteem	.53 (.45)	1.37	.24	.70	4.14	
Step 2							
	Constant	3.08 (1.76)	3.06	.08	21.818		
	Self Esteem	1.13 (.58)	3.72	.05	.982	3.085	
	Openness	-3.63 (3.25)	1.24	.27	.000	15.619	
	Internal LOC	-1.11 (.40)	7.76*	.01	.151	.720	
	Open. x Int. LOC	.88 (.69)	1.62	.20	.623	2.410	
Open. x Int. LOC							

Note: **p* <.05, *N* =76, Open. x Int. LOC is the interaction term of Openness x Internal LOC

		<i>b</i> (<i>SE</i>)	Wald	<i>p</i>	95% CI for exp <i>b</i>		
					Lower	exp <i>b</i>	Upper
Included							
Step 1							
	Constant	-1.70(.32)	28.0*	.00		.18	
	Self-esteem	-.52 (.55)	.89	.35	.20	.59	1.76
Step 2							
	Constant	.90 (1.87)	.23	.63		2.47	
	Self Esteem	-.67 (.60)	1.27	.26	.16	.51	1.65
	Emotional Stability	.11 (1.97)	.00	.95	.02	1.12	52.71
	Internal LOC	-.29 (.39)	.53	.47	.35	.75	1.63
	Emo. Stab. x Int. LOC	.12 (.43)	.08	.78	.48	1.13	2.65

Note: * $p < .05$, $N=76$, Emo. Stab. x Int. LOC is the interaction term of Emotional Stability x Internal LOC

Table A9

Hierarchical Linear Regression for Perception of Life Goals

			95% CI		t	p	
			lower	upper			
Step 1		b	SE b				
	Constant	-.05	.31	-.68	.57	-.17	.86
	Self-Esteem	.36	.19	-.02	.74	1.89	.06
	Age	.00	.00	-.02	.02	.18	.85
Step 2							
	Constant	-.00	.32	-.65	.63	-.02	.98
	Self Esteem	.14	.21	-.28	.55	.65	.52
	Age	.00	.01	-.02	.02	.02	.98
	Emotional Stability	.27*	.13	.01	.53	2.07	.04
	Conscientiousness	.05	.19	-.34	.43	.25	.80
	Extraversion	.13	.14	-.14	.41	.99	.33
	Internal LOC	.12	.12	-.11	.35	1.05	.30

Note: $R^2 = .05$ for Step 1; $\Delta R^2 = .095$ for Step 2 ($ps = 1.90$). * $p < .05$

APPENDIX B

LETTER OF COOPERATION

ADMINISTRATION
314 E. 6th St., P.O. Box 4030
Waterloo, IA 50704
(319) 236-9626
FAX (319) 291-3947



4-11-2013

Luci L. Dumas, B.A.
The University of Northern Iowa
Clinical Science, Psychology
Office: Baker 310

Dear Luci:

The Department of Correctional Services is pleased to collaborate with you on your project, "The Influence of Locus of Control and Personality Traits on Life Goals in Offenders."

I understand that participating in this research will include allowing you and your research team to conduct interviews with offenders housed at the Waterloo Residential Correctional Facility. In our discussions together, I believe you have provided all the necessary information to me. I appreciate the fact that you fully explained the project and clearly answered my questions regarding your research.

I am confident that you and your research team will maintain the confidentiality of all research participants throughout all phases of this project.

According to our agreement, project activities will be carried out as described in the research plan reviewed and approved by the University of Northern Iowa Institutional Review Board.

I look forward to working with you, and please consider this communication a Letter of Cooperation on behalf of the Department of Correctional Services.

Sincerely,

Ross Todd
Executive Officer
319-292-1263
Ross.Todd@iowa.gov

APPENDIX C

PERSONAL CONCERNS INVENTORY- OFFENDER ADAPTATION

Read through the Areas of Life listed below, and think carefully about each of them. Then tick the areas in which you have important concerns or things that you would like to change. For now, TICK ONLY the areas that apply.

- _____ **Home and Household Matters (Area #1)**
- _____ **Employment and Finances (Area #2)**
- _____ **Partner, Family, and Relatives (Area #3)**
- _____ **Friends and Acquaintances (Area #4)**
- _____ **Love, Intimacy, and Sexual Matters (Area #5)**
- _____ **Self Changes (Area #6)**
- _____ **Education and Training (Area #7)**
- _____ **Health and Medical Matters (Area #8)**
- _____ **Substance Use (Area #9)**
- _____ **Spiritual Matters (Area #10)**
- _____ **Hobbies, Pastimes, and Recreation (Area #11)**
- _____ **My Offending Behaviour (Area #12)**
- _____ **Current Living Arrangements (Area #13)**
- _____ **Other Areas (not included above) (Area #14)**

Rating Scales

Importance: How important is it to me for things to turn out the way I want? Choose a number from 0 to 10, where

0 is not important at all, and 10 is very important

How likely: How likely is it that things will turn out the way I want?

Choose a number from 0 to 10, where

0 is not likely at all, and 10 is very likely

Control: How much control do I have in causing things to turn out the way I want?

Choose a number from 0 to 10, where

0 is no control at all, and 10 is much control

What to do: Do I know what steps to take to make things turn out the way I want?

Choose a number from 0 to 10, where

0 is not knowing at all, and 10 is knowing exactly

Happiness: How much happiness would I get if things turn out the way I want?

Choose a number from 0 to 10, where

0 is no happiness at all, and 10 is great happiness

Unhappiness: Sometimes we feel unhappy, even if things turn out the way we want.

How unhappy would I feel if things turn out the way I want?

Choose a number from 0 to 10, where

0 is no unhappiness at all, and 10 is great unhappiness

Commitment: How committed do I feel to make things turn out the way I want?

Choose a number from 0 to 10, where

0 is no commitment at all, and 10 is strong commitment

When will it happen? How long will it take for things to turn out the way I want?

Choose a number from 0 to 10, where

0 is very short (e.g., days), and 10 is very long (e.g., years or never)

Will offending help? Will my offending behaviour help things to turn out the way I want? Choose a number from 0 to 10, where

0 is not helpful at all, and 10 is very helpful

Will offending interfere? Will my offending behaviour interfere with things turning out the way I want? Choose a number from 0 to 10, where

0 is not interfere at all, and 10 is interfere very much

Area #1: Home and Household Matters. When you think of this area, what concerns come to mind?		Area #1:	
Step 1. Jot down your concerns:		Step 3. Choose numbers from Rating Scale Sheet and fill in boxes:	
Concern #1	What I would like to have happen is . . .	→ Importance: → How likely: → Control: → What to do: → Happiness: → Unhappiness: → Commitment: → When it will happen: → Offending help: → Offending interfere:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Concern #2	What I would like to have happen is . . .	→ Importance: → How likely: → Control: → What to do: → Happiness: → Unhappiness: → Commitment: → When it will happen: → Offending help: → Offending interfere:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Concern #3	What I would like to have happen is . . .	→ Importance: → How likely: → Control: → What to do: → Happiness: → Unhappiness: → Commitment: → When it will happen: → Offending help: → Offending interfere:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

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APPENDIX D

IPIP, 50-ITEM QUESTIONNAIRE

Please tick the bubble that corresponds with the response that is most true for you.

		Not true at all	Not completely true	Neither true nor false	Somewhat true	Very true
1.	I am the life of the party.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	I feel little concern for others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	I am always prepared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	I get stressed out easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	I have a rich vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	I don't talk a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	I am interested in people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	I leave my belongings around.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	I am relaxed most of the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	I have difficulty understanding abstract ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	I feel comfortable around people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	I insult people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	I pay attention to details.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	I worry about things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	I have a vivid imagination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	I keep in the background.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	I sympathize with others' feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	I make a mess of things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	I seldom feel blue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	I am not interested in abstract ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	I start conversations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	I am not interested in other people's problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	I get chores done right away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	I am easily disturbed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	I have excellent ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	I have little to say.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	I have a soft heart.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	I often forget to put things back in their proper place.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	I get upset easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	I do not have a good imagination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	I talk to a lot of different people at parties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	I am not really interested in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	I like order.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	I change my mood a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	I am quick to understand things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	I don't like to draw attention to myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	I take time out for others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	I shirk (get out of) my duties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39.	I have frequent mood swings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40.	I use difficult words.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41.	I don't mind being the center of attention.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42.	I feel others' emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43.	I follow a schedule.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44.	I get irritated easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45.	I spend time reflecting on things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46.	I am quiet around strangers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47.	I make people feel at ease.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48.	I am exacting (precise) in my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49.	I often feel blue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50.	I am full of ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX E

MULTIDIMENSIONAL LOCUS OF CONTROL INVENTORY

For each of the following statements, tick the bubble that corresponds with the response that is most true for you.

Item	Statement	Strongly Disagree	Disagree Somewhat	Slightly Disagree	Agree Somewhat	Strongly Agree
1.	Whether or not I get to be a leader depends mostly on my ability.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	To a great extent my life is controlled by accidental happenings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	I feel like what happens in my life is mostly determined by powerful people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	Whether or not I get into a car accident depends mostly on how good a driver I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	When I make plans, I am almost certain to make them work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	Often there is no chance of protecting my personal interests from bad luck.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	When I get what I want, it's usually because I'm lucky.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	How many friends I have depends on how nice a person I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	I have often found that what is going to happen will happen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	My life is chiefly controlled by powerful others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	Whether or not I get into a car accident is mostly a matter of luck.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	People like me have very little chance of protecting our personal interests when they conflict with the interests of strong pressure groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	Getting what I want requires pleasing those people above me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	If important people were to decide they didn't like me, I probably wouldn't make many friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	I can pretty much determine what will happen in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	I am usually able to protect my personal interests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	Whether or not I get into a car accident depends mostly on the other driver.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	When I get what I want, it's usually because I worked hard for it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	My life is determined by my own actions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	It's chiefly a matter of fate whether or not I have a few friends or many friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX F

ROSENBERG'S SELF-ESTEEM SCALE

Please tick the bubble that corresponds with the response that is most true for you.

	Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that I am a person of worth, at least on an equal plane with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	I feel that I have a number of good qualities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. *	All in all, I am inclined to feel that I am a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	I am able to do things as well as most other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. *	I feel I do not have much to be proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	I take a positive attitude toward myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	On the whole, I am satisfied with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. *	I wish I could have more respect for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. *	I certainly feel useless at times.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	At times I think I am no good at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Scored in the reverse direction with strongly agree having a value of zero and strongly disagree having a value of three.